

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kevin P. Windo

Serial No:

Filing Date:

Title: REWIND ARMS FOR PLASTIC FILM SLITTING APPARATUS

Priority Application: Country: Great Britain; No.: 0208688.2; Filing Date: April 16, 2002

PCT Application: No.: PCT/GB03/01628 Filing Date: April 14, 2003

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October 14, 2004

Attorney's docket No.: KIN216P1

**CLAIM OF PRIORITY**

Hon. Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to Title 35, United States Code, Section 119 (1952), the undersigned hereby claims the benefit of the filing date of a prior foreign patent application forming a basis of the U.S. application.:

Country: GREAT BRITAIN

Application No.: 0208688.2

Date of Filing: April 16, 2002

Respectfully submitted,

Kevin P. Windo.

By: Horst M. Kasper  
Horst M. Kasper, his attorney,  
13 Forest Drive, Warren, N.J. 07059  
Tel.:(908)757-2839 Fax:(908)668-5262  
Reg. No. 28559; Docket No.: KIN216

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kevin P. Windo

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October 14, 2004

Attorney's Docket No.: KIN215R1

**REQUEST TO ACCEPT PATENT APPLICATION FOR ENTERING  
UNITED STATES NATIONAL PHASE UNDER 35 USC §371**

Hon. Commissioner of Patents and Trademarks

Box PCT

Washington, D.C. 20231

SIR:

A patent application related to the above identified application was filed on April 14, 2003 under the PCT Treaty under the docket number PCT/GB062/01628.

It is respectfully requested that the present application be treated as an application filed under the Section 35 U.S.C. § 371 for transferring a PCT application PCT/GB03/01628, naming the United States, into the national phase and that the present application be granted any and all benefits and in particular those benefits relating to a priority recognition of prior filings under jurisdiction of treaty members and available under the Patent Cooperation Treaty (Washington Treaty), the Paris Convention Treaty, and under the United States Code based on the filing under the Patent Cooperation Treaty of PCT application PCT/GB03/01628.

If there should be any problems in granting the benefits available under the Patent Cooperation Treaty and/or 35 USC §371 based on such items as incompleteness of application, excessive time delays or defective application papers, then it is alternatively respectfully requested that prior to the expiration through abandonment of a filing under 35 USC §371 and under charging the required fees from deposit account, the present application be treated as an application and/or continuation application filed at a time required under any one of the sections 35 U.S.C. §111, 35 U.S.C. §363, and/or 35 U.S.C. §365(c) as applicable and that the present application be treated as a continuation or continuation-in-part application of the PCT application PCT/GB03/01628.

Recognition of PCT national phase status or, respectively, continuation or continuation-in-part status under the PCT Treaty and/or of the claimed priority dates of April 16, 2002 is respectfully requested for the patent application documents in the above captioned matter.

Respectfully submitted,  
Kevin P. Windo

By: Horst M. Kasper  
Horst M. Kasper, his attorney,  
13 Forest Drive, Warren, N.J. 07059  
Tel.:(908)526-1717 Fax:(908)526-6977  
Reg. No. 28,559; Docket No.: KIN216

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10/51178628  
PT/GB 2003 7018628

Rec'd PCTO 15 OCT 2004

INVESTOR IN PEOPLE

## PRIORITY DOCUMENT

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I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

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Signed

Dated 20 May 2003

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17/77

17AFR02 E711455-3 D02096  
P01/7700 0.00-0208688.2  
The Patent Office

## Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

16 APR 2002

Cardiff Road  
Newport  
South Wales  
NP9 1RH

1. Your reference

42199

2. Patent application number

(The Patent Office will fill in this part)

0208688.2

3. Full name, address and postcode of the or of each applicant (underline all surnames)

VALMET ATLAS plc  
Wolseley Road,  
Woburn Road Industrial Estate,  
Kempston,  
Bedford, MK42 7XT.

Patents ADP number (if you know it)

8365025001

If the applicant is a corporate body, give the country/state of its incorporation

United Kingdom

4. Title of the invention

Rewind arms for plastic film slitting apparatus.

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

J.B. King,  
KINGS PATENT AGENCY LIMITED

73 Farringdon Road,  
London, EC1M 3JQ,  
United Kingdom

Patents ADP number (if you know it)

1608001

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country	Priority application number (if you know it)	Date of filing (day / month / year)
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7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application	Date of filing (day / month / year)
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8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

Yes

- a) any applicant named in part 3 is not an inventor, or
- b) there is an inventor who is not named as an applicant, or
- c) any named applicant is a corporate body.

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9. Enter the number of sheets for any of the following items you are filing with this form.  
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Continuation sheets of this form

Description 4

Claim(s)

Abstract

Drawing(s)

1 + 1

*JMK*

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Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents  
(please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature

*J.B. King*

Date 16/04/02

J.B. King (Agent)

12. Name and daytime telephone number of person to contact in the United Kingdom

Voice: 020 7248 6161

Fax: 020 7831 0926

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**Title:****Rewind arms for plastic film slitting apparatus.**

This invention relates to rewind arms for holding winding cores onto  
5 which plastics film is wound after processing on a slitter rewinder machine  
wherein a wide film is slit into lesser widths and wound onto cores for further  
use.

In such machines a wide roll of film is passed through a machine, cut or  
slit with blades longitudinally and the slit widths rewound individually using  
10 pairs of rewinding arms onto cores. There is a frequent requirement to rewind  
film onto paper cores of various diameters according to market requirements.  
Industrial standard core inside diameters are 76 mm and 152 mm. Slitter  
rewinder machine which achieve this use individual contact rollers and in view  
of the great variety of slit widths it is not practical to have a special length of  
15 contact roller for each individual slit width. Each contact roller is therefore of  
an extended length and the dimension of the top core holding zone of the  
rewind arm has to be limited in size to avoid the contact roller touching the arm  
at the overlaps each side of the core width. The design of the top of the rewind  
arm is therefore limited in size by the minimum core diameter that the machine  
20 is required to handle.

Hitherto machines have made use of two designs of rewind arms to  
handle the 76 mm and the 152 mm core diameters. This is due to the fact that  
a rewind arm top dimension which is mechanically suitable to hold a 76 mm

core has mechanical components which are limited in size being the drive shaft and bearings and which are unsuitable for the larger size cores. Because of this a minimum core internal diameter of 152 mm is often specified even though a smaller size would be preferred.

5 An object of this invention is to provide a rewind arm for slitter rewinder machines which can accommodate different core diameters and which minimises interference with a contact roller.

According to this invention there is provided a rewind arm assembly for slitter rewinder machines wherein one side of the top of the rewind arm has 10 core shaft and support bearings adapted to a first size of core internal diameter and the other side of the top of the rewind arm has core shaft and support bearings adapted to a second size of core internal diameter.

With this construction the top of the rewind arm may thus have a 15 housing for the two sets of shaft supports and bearings which to one side has a lesser dimension than the other at least in zone of the contact roller. The top housing thus being stepped. This allows the contact roller to extend laterally beyond the top part of the support arm without interference with or fouling the arm when a smaller diameter core is being wound. Naturally the contact roller can only extend widthways up to the steps on each support arm but 20 nevertheless this means that a single contact roller may be used with a range of slit widths for smaller size cores.

This invention, and further and preferred features thereof are described in conjunction with the drawings showing one embodiment by way of an

example. In the drawings:

Fig1 shows a longitudinal section through two diameters of core mounted on support arms according to this invention,

5 Fig. 2 shows and end view of a smaller diameter core and support arm, and

Fig. 3 shows and end view of a larger diameter core and support arm.

Referring to the drawings there is shown a winding core 1 of 76 mm diameter and a winding core 2 of 152 mm diameter. The core 1 is mounted at 10 each end on a locking core chuck 3 carried by bearings 4 located within a top housing part 5 of a rewind arm 6. The core 2 is mounted at each end on a heavier duty locking core chuck 7 carried by larger bearings 8 also located within the housing 5.

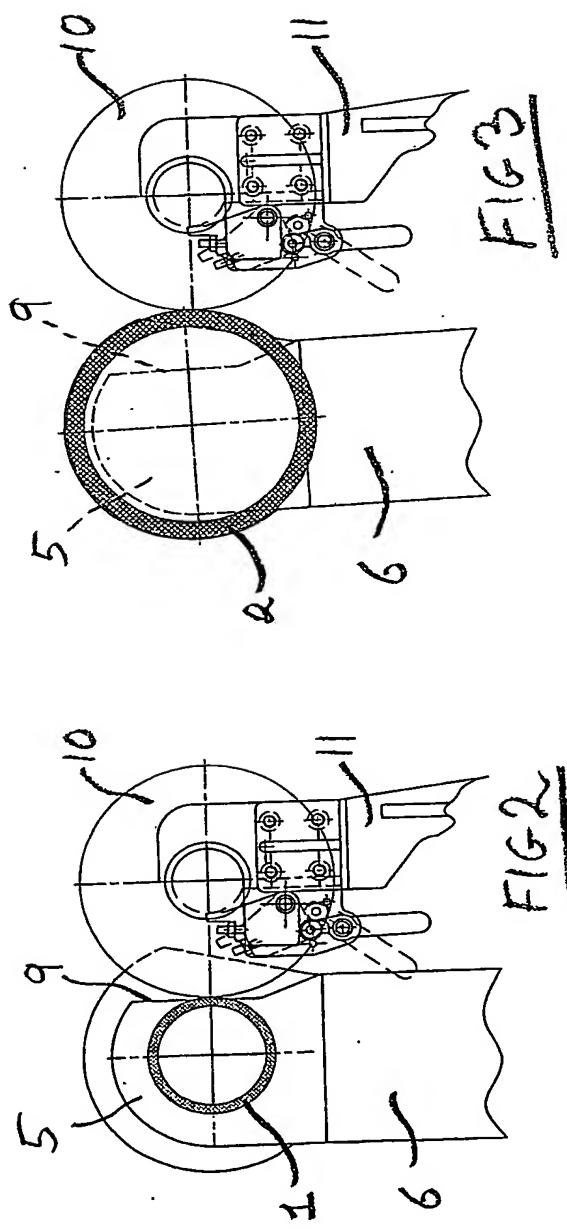
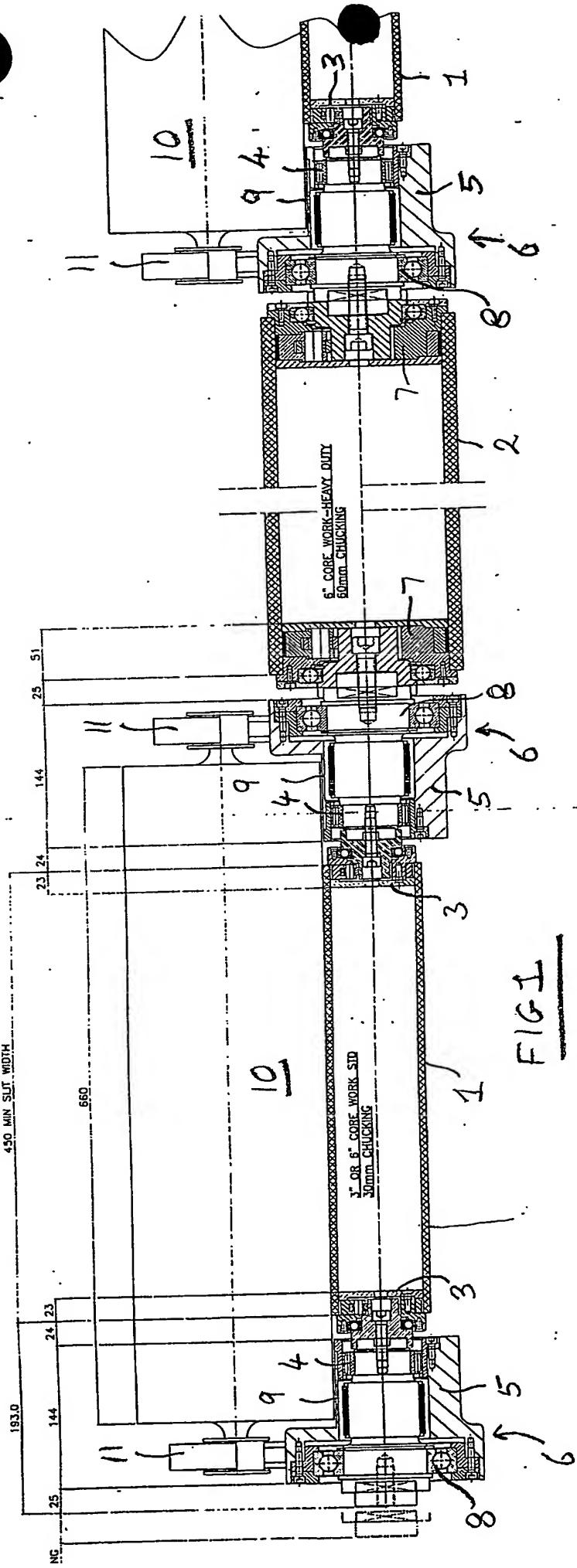
15 The housing 5 is cut away or stepped at 9 whereby a contact roller 10 having a width greater than that of the core 1 may be accommodated and brought into contact with the core 1 at the minimum diameter thereof. The contact roller 10 is supported on a pressure arm assembly 11 not shown in detail. The stepped part 9 of the housing 5 on each arm enables a larger bearing assembly 8 to be provided for the larger diameter cores 2 whilst 20 retaining a common drive arrangement. In the drawings the core 2 is shown as idle.

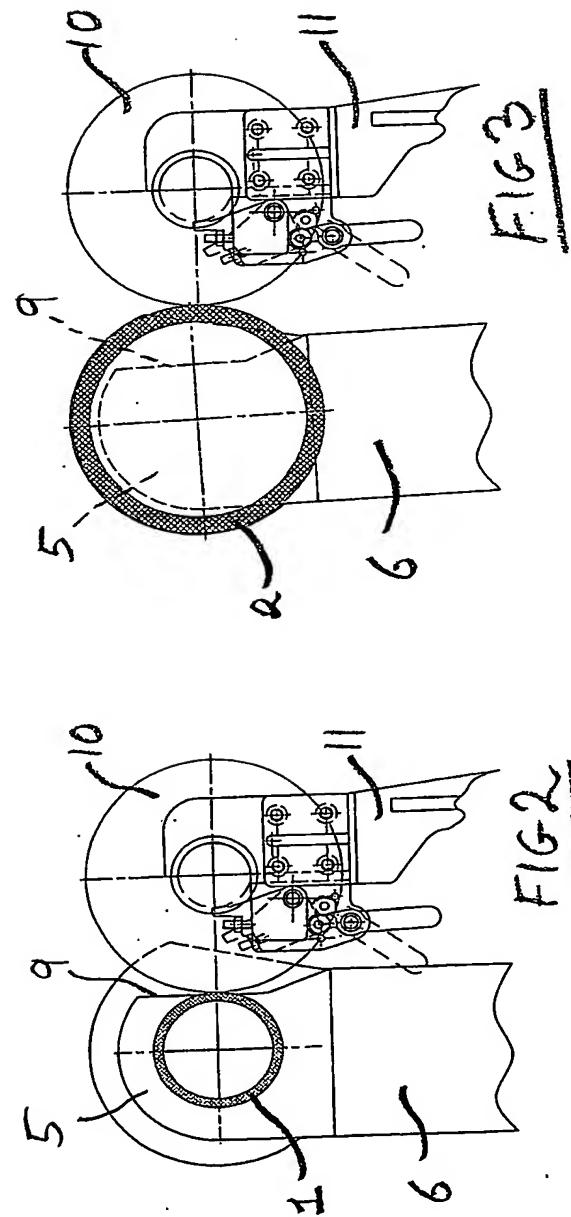
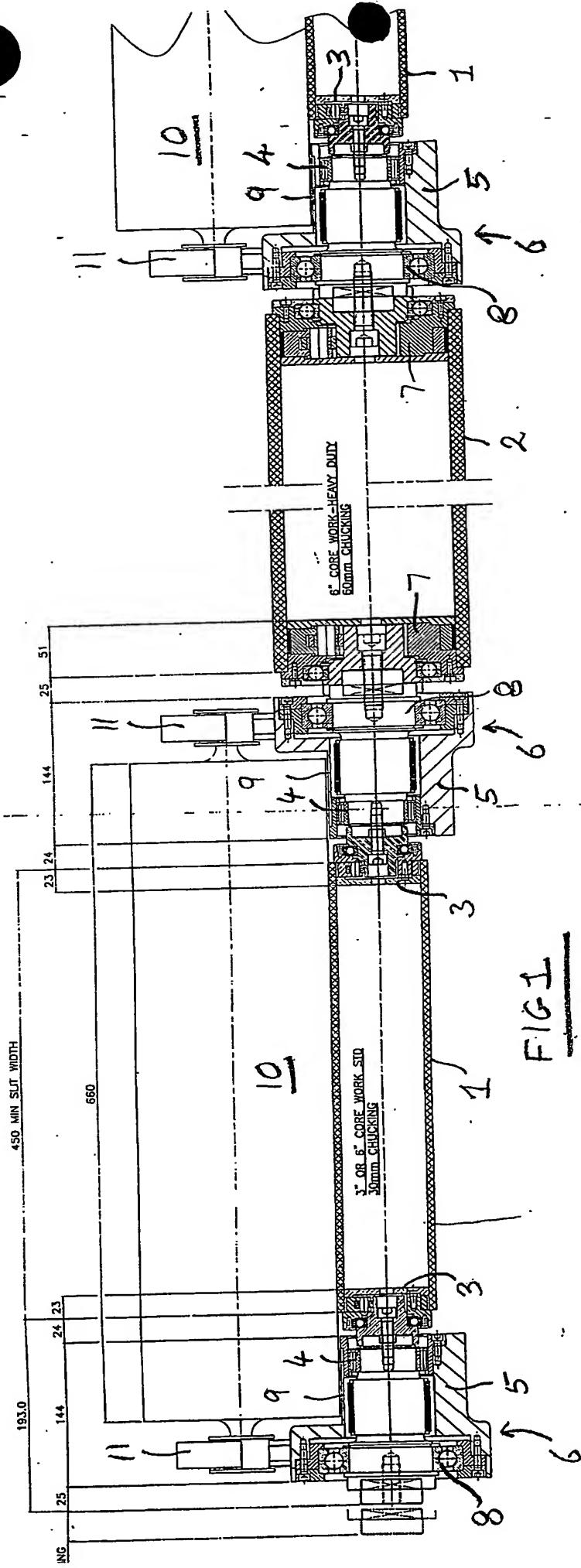
To change from smaller to larger diameter cores does not require a change to be made to the rewind arms themselves but the arms need only be

moved laterally or reversed to accommodate the required core size. The cores 2 can be used with wider contact rollers 10 which overlie the housings 5 without interference.

A slitter rewinder machine may include all of the arms 6 in accordance 5 with this invention or some arms only may be provided.

It will be understood that parts of the slitter rewinder machine are not described as these are known in the art and do not form an essential part of this invention other than in combination with the rewind arms described.





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